

WHAT IS CLAIMED IS:

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1. A method for calibrating a print control parameter to avoid a banding artifact on a printed media sheet, comprising the steps of:
printing on a media sheet a test plot having a plurality of areas, each area being a common image printed using a different value of the print control parameter;
receiving an input indicating which one area of the plurality of areas exhibits either the absence of or the least amount of the banding artifact as perceived by a person viewing the media; and
setting the print control parameter to the value corresponding to the indicated one area.
 2. The method of claim 1, wherein the print control parameter is linefeed error adjustment.
 3. The method of claim 1, wherein the print control parameter is swath height error adjustment.
 4. The method of claim 1, wherein the set value is a first value, and further comprising the steps of:
identifying a selected media type for a print job;
determining a second value for the print control parameter for use in printing onto the identified media type; and
printing the print job onto a media sheet using the second value for the print control parameter.
 5. The method of claim 4, wherein the step of determining comprises deriving the second value as a function of the first value and the identified media type.
 6. The method of claim 4, further comprising the step of prestoring a set of alternate values for the print control parameter, wherein each one of the set of alternate values corresponds to a different media type; and wherein the step of determining comprises looking up one of the set of alternate values based upon the identified media type.

7. A method for determining a normal value for a linefeed error adjustment parameter, comprising the steps of:

5 printing on a media a test plot having a plurality of areas, each area being a common image printed using a different value for the linefeed error adjustment parameter;

receiving an input indicating which one area of the plurality of areas has a highest print quality as perceived by a person viewing the media; and

10 setting the normal value of the linefeed error adjustment parameter to the value corresponding to the indicated one area.

8. The method of claim 7, in which the linefeed error parameter value is automatically varied with a life cycle schedule of roller wear.

15 9. The method of claim 7, further comprising the steps of:

identifying a selected media type for a print job;

16 deriving a temporary linefeed error parameter value for use in printing onto the identified media type; and

20 printing the print job onto a media sheet using the temporary linefeed error parameter.

10. The method of claim 9, wherein the step of deriving comprises deriving the temporary linefeed error adjustment parameter as a function of the normal value and the identified media type.

25 11. The method of claim 7, further comprising the steps of:

identifying a selected media thickness for a print job;

30 deriving a temporary linefeed error parameter value for use in printing onto the identified media type, wherein the temporary linefeed error adjustment parameter is derived as a function of the normal value and the identified media thickness; and

printing the print job onto a media sheet using the temporary linefeed error parameter.

12. The method of claim 7, further comprising the steps of:
identifying a selected media finish for a print job;
deriving a temporary linefeed error parameter value for use in printing
onto the identified media type, wherein the temporary linefeed error adjustment
parameter is derived as a function of the normal value and the identified media finish;
5 and

printing the print job onto a media sheet using the temporary linefeed
error parameter.

13. The method of claim 7, in which the step of receiving comprises
receiving an input indicating which one area of the plurality of areas either lacks or has
least banding.

14. The method of claim 7, in which each area of the plurality of
areas comprises a gray scale image, wherein the step of printing using a different value
for the linefeed error adjustment parameter at each area results in a different degree of
banding for each area, wherein light banding indicates a linefeed error adjustment
parameter which causes over-feeding and dark banding indicates a linefeed error
adjustment parameter which causes under-feeding, and in which the step of receiving
20 comprises receiving an input indicating which one area of the plurality of areas either
lacks or has least banding in the corresponding gray scale image.

15. An apparatus which prints a test plot onto a media sheet to
calibrate a normal value for a linefeed error adjustment parameter, the apparatus
25 comprising:

a drive motor;
a drive shaft driven by the drive motor;
a roller coupled to the drive shaft which moves with the drive shaft;
an encoder which generates a first signal corresponding to position of
30 the drive shaft;
a print controller which receives the first signal and in response
generates a second signal fed to the drive motor for controlling the drive motor;
memory which stores a test pattern and a range of adjustments for the
linefeed error adjustment parameter;

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8 ~~20.~~ ³ The printer of claim ~~15~~, wherein the memory stores adjustment factors corresponding to different media stocks and wherein the processing means adjusts the linefeed error adjustment parameter for a given print job based upon the media stock for said print job.

9 ~~21.~~ ³ The printer of claim ~~15~~, wherein the memory stores adjustment factors corresponding to different media finishes and wherein the processing means adjusts the linefeed error adjustment parameter for a given print job based upon the media finish for said print job.

10 ¹⁰ ~~22.~~ ³ The apparatus of claim ~~15~~, wherein the apparatus further comprises a sensor for detecting media type; and
means for determining a temporary linefeed error parameter value for
15 use in printing said ensuing print job which is derived as a function of the normal value of the linefeed error adjustment parameter and a detected media type.

11 ~~23.~~ ³ The apparatus of claim ~~15~~, further comprising:
means for identifying a media type for a print job;
20 means for determining a second value for the linefeed error adjustment parameter for use in printing onto the identified media type.

11 ~~24.~~ ¹⁰ The apparatus of claim ~~23~~, wherein the memory stores the normal value and a set of alternate values for the normal value for use while printing
25 onto an alternate media type, and wherein the determining means selects the second value from the set of alternate values.